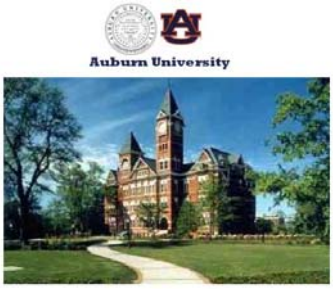

Auburn University

Master of Industrial and Systems Engineering

STUDENT DATA:
NAME: ROADMAP'S DEGREE **SSN:** 000-00-0000

	Credit Required	Potential Credit
Facilities Design and Operation (INSY 6236) Coreq., INSY 3700. Facilities design problems that seek to efficiently balance the need of production, material handling, information flow and the human operator. Warehousing operations and material handling problems.	**3.00**	
Production and Inventory Control Systems (INSY 6246) Prereq., INSY 3700. Analysis and design of production and inventory control systems with emphasis on quantitative methods, algorithms, and information technology.	**3.00**	
Manufacturing / Production Economics (INSY 6606) Prereq., INSY 3600. Continuation of INSY 3600. Emphasis on design economics and cost estimating techniques and applications to various manufacturing and service operations.	**3.00**	
Ergonomics I (INSY 7066) Prereq., INSY 3020. Overview of the human body systems and evaluation of the physiological response of the human body to occupational activities with emphasis on task design.	**3.00**	
Advanced Engineering Statistics I (INSY 7306) Prereq., STAT 3610. Advanced concepts of experimental design including blocked designs, analysis of variance regression approach, and fractional factorials in base-2 designs. Emphasis throughout is on developing and improving industrial products and processes. Credit will not be given for both INSY 7300 and STAT 7300.	**3.00**	
Linear and Integer Programming (INSY 7426) Prereq., INSY 3410. Linear and integer programming emphasizing solution techniques and theory.	**3.00**	
Industrial and Systems Engineering Electives or Transfer credit Consider the following courses: INSY 6016 SAFETY ENGINEERING I INSY 6026 SAFETY ENGINEERING II INSY 6256 SCHEDULING AND PROJECT MANAGEMENT	**9.00**	

INSY 6336 OFF-LINE AND ON-LINE QUALITY CONTROL

INSY 6386 RELIABILITY ENGINEERING

INSY 6476 SEARCH METHODS FOR OPTIMIZATION

INSY 6806 LEAN PRODUCTION

INSY 6976 INDUSTRIAL AND SYSTEMS ENGINEERING SPECIAL TOPICS

INSY 7056 INDUSTRIAL HYGIENE AND ENVIRONMENTAL HAZARDS

INSY 7076 ERGONOMICS II

INSY 7236 ADVANCED LAYOUT AND LOCATION

INSY 7246 PRODUCTION AND INVENTORY CONTROL THEORY

STAT/INSY 7316 ADVANCED ENGINEERING STATISTICS II

INSY 7426 LINEAR AND INTEGER PROGRAMMING

INSY 7556 STOCHASTIC OPERATIONS RESEARCH

INSY 7606 ADVANCED ECONOMIC DECISION ANALYSIS

INSY 8066 ADVANCED ERGONOMICS

INSY 8426 TOPICS IN OPTIMIZATION

Visit the Auburn University website for a description of these courses.

Master's in ISE Research Project (INSY 7986) **3.00**

Prereq., departmental approval. Non-thesis master’s project. Course may be repeated for a maximum of 5 credit hours.

Graduate credit, application of which must be determined by Admissions

TOTAL **30.00** **0.00**

Thank you for requesting support from the U.S. Coast Guard Institute (CGI). Whereas we serve as an activity in support of your unit Educational Services Officer (ESO), you are encouraged to seek assistance from your local ESO in your academic endeavors. The following information is provided to help you understand what is presented in this degree plan:

NOTE FOR ALL STUDENTS: Every reasonable effort to attain accuracy has been made; no responsibility is assumed for clerical errors or errors occasioned by honest mistake. Should you discover an error, it is your responsibility to report it immediately to your advisor.

Auburn has been cited by several of the nation's most selective college guides as

one of the best universities in the United States. US News and World Report ranked Auburn as the 27th Best Value of National Universities; Kiplinger's Personal Finance Magazine rated Auburn among the top 20 Public Universities in the United States; and The Chronicle of Higher Education ranks Auburn among the nation's Top 100 Research Institutions.

Are you looking for an opportunity to pursue a master's degree in Industrial and Systems Engineering while still maintaining full-time employment?

The Auburn University Samuel Ginn College of Engineering allows you to pursue your dream degree at your home or work site through its video-based distance education program.

This program combines elements of traditional instruction with modern day delivery methods to extend educational opportunity beyond the limits of campus, allowing you to improve your educational credentials without disrupting your career or relocating your family.

The Auburn University Samuel Ginn College of Engineering provides some of the necessary curriculum for you to earn your non-thesis Master of Industrial and Systems Engineering through distance education.

The program is a flexible, videotape-based adaptation of the traditional or on-campus program. Graduate level courses are taped in our multimedia classrooms while the classes are being conducted. Videotapes in 1/2 inch standard VHS format are then mailed on the day of the class and are usually available for you the day after the on-campus class session.

As a distance education student, you are expected to complete the same homework assignments and take the same exams as on-campus students. In effect, you are in the same class and receiving the same quality instruction as on-campus students.

Immediate access to professors and classmates is available through the Internet and other communications technologies. You can communicate by telephone, fax, mail and e-mail. In addition, advisors will set aside designated telephone time for you.

Unfortunately, many prerequisites are not available through distance education at Auburn University. Not all departmental courses are offered as distance education courses, but all core courses are.

While most graduate students in Industrial and Systems Engineering have an engineering background, it is not a requirement. However, there is a set of core courses all ISE students must have taken (prerequisities), which assume certain background requirements. They include:

> Math through differential equations (2 years)
> Calculus based physics (1 year)
> Operations research (1 year)
> Engineering economics (1 year)

The MS and Ph.D. degrees both require an on campus residency period (1 to 2 semesters respectively). These graduate school requirements cannot be waived. The

MISE has no residency requirement.

It is not necessary for a student to have a Masters degree to enter the Ph.D. program. However, we do recommend a student do a Masters degree before entering the Ph.D. program.

Master of Industrial and Systems Engineering available with:
30 semester hours of course work of which 18 hours are from a set of core courses.
Nine hours of electives
Three-hour design project

Other Requirements

Each candidate must pass an on-campus final examination covering the course work taken for this degree.

The Graduate School allows you 5 years from the time of admittance to complete the degree program.

Program Costs (Subject to change)
Graduate School Application Fee $25
Video Engeineering Course Fee per credit hour $504
Minimum number of semester credit hours 30
Graduation Fee (billed during graduation semester) $20
GRAD 7000 (billed only if taken during graduation semester) $263
Total Estimated Program Cost $15,165
Textbooks and course materials are not included.

For additional information on the graduate program contact:
Dr. George Blanks
College of Engineering Extension Director
217 Ramsey Hall
Auburn University, AL 36849-5331
1-334-844-5759
E-mail: blankgw@auburn.edu
Website: http://www.eng.auburn.edu

POLICY NOTES:

A minimum of 15 semester credits in 7000/8000 level courses.
A minimum of 21 semester credits in the major area.
A minimum of 24 semester credits taken at Auburn.

This college is rated as one of the nation's best in U.S. News & World Report's "America's Best Colleges" issue.

Evaluation completed by: Charles Morrison On: 27 July 2007